

ABSTRACT OF THE DISCLOSURE

An integrated bi-directional transceiver device for multiple wavelength optical signals that has a high level of wavelength isolation at the receivers of the device and low cross-talk of light between an external laser transmitter and the receivers. A WDM planar light wave circuit (PLC) assembly combines high spatial light confinement waveguide structures and a variable thickness dielectric wavelength selective filter (WSF) on the surface of the device to reflect a first wavelength signal and to pass a second wavelength signal. Embodiments of the invention include branching waveguide structures and folded path waveguide assemblies with multiple WSF's.